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WILLIAM HEALEY DALL

By the death of Dr. Dall on March 27, 1927, American conchology has lost its most eminent representative.

W. H. Dall was born in Boston, Mass., August 21, 1845. His father was a missionary of the Unitarian Church to India. Educated in the public schools of Boston, Dall afterward studied under Louis Agassiz at Harvard.

"Dall, in common with most naturalists, developed an interest in natural history when so young that he was unable to recall the date. The accident that led him to become interested in shells was, he said, the possession when a boy of twelve of a copy of Dr. Gould's 'Invertebrata of Massachusetts'. Inspired by this work, and living near Boston, he undertook to make a complete collection of the shells of Massachusetts. Finding species that he was unable to name, he made bold to consult the author, Dr. Gould, who gave him much sound advice, and whom Dall characterized as 'one of the best and most lovable of men'.

"A little later, when employed in an office on the India wharf in Boston, where he did boy's work for wages, he kept a book in his desk and at odd times when unoccupied with his regular task, copied scientific books which he then thought he would never be able to buy.

"The next factor in shaping his zoological career was work in the museum at Cambridge, where he fell under the

magnetic influence of Louis Agassiz. His third opportunity occurred in Chicago at the time of the Civil War, when, having failed to obtain a livelihood in Boston, he found employment in the Windy City. Although hard at work during the day, he spent his evenings studying at the Chicago Academy of Sciences.

"It was there that he met William Stimpson and Robert Kennicott, both of whom became dear personal friends. It was there also that he determined, in the event of a choice of occupations, to accept irrespective of pay the one that promised most in the way of opportunity for continuing scientific studies. Acting on this resolve he more than once declined offers of higher salary and undertook harder work with less pay where there were better advantages for study.

"In 1865 he visited Alaska as one of the scientific staff of the Western Union International Telegraph Expedition, and when his friend, Robert Kennicott, leader of the expedition, died on the ice of the Yukon, Dall, though only twenty-one years old, was unanimously chosen to succeed him. In 1867 he explored and mapped the mighty Yukon River from the coast up to Fort Yukon, then believed to be on or near the international boundary. On his return he published an illustrated volume on 'Alaska and its Resources', (1870) comprising upwards of six hundred pages and a map, which for many years remained the standard authority on the territory. Professor Baird, appreciating his industry and talent, promptly took him into the fold of the Smithsonian Institution, which except during absences on field expeditions, continued to be his headquarters until his recent fatal illness.

"From 1871 to 1874 Dall was captain of a Coast Survey vessel and head of a scientific survey of the Aleutian Islands and adjacent coasts, the results of which, with much other material, were embodied in a quarto volume entitled the 'Pacific Coast Pilot, Coasts and Islands of Alaska' (1879), prepared jointly by himself and his associate, Marcus Baker.

"From 1880 till his death he was an honorary curator in the National Museum; from 1884 to 1925 he was paleontologist of the United States Geological Survey; from 1893 till 1927 he held the chair of invertebrate paleontology in the Wagner Institute of Science; and from 1899 to 1915 was honorary curator of the Bishop Museum, Hawaii.

"He was the recipient of several medals and honorary degrees, including that of LL.D."¹ He held honorary membership in many societies, American and foreign. He was President of the American Association for the Advancement of Science in 1882 and 1885.

Dall's early work on mollusks was mainly published in the American Journal of Conchology (Vols. 5 to 7), and was based upon West Coast material. The papers on limpets and Brachiopoda, among others, were generally recognized as important, and gained for the young naturalist, who was still well under thirty, favorable standing in the group of distinguished conchologists of that time,—such men as Newcomb, Binney, Tryon, Cooper, Bland, Lea, Prime, and others.

When the series of Proceedings of the U. S. National Museum was begun in 1878, Dall became one of its chief contributors. His first publication on Tertiary paleontology was at this time. In 1881 his paper on chitons, making Carpenter's genera valid, was published, and in 1883 an important paper on Hemphill's collections of Florida shells.

In 1886 and 1889 the Reports on the "Blake" Mollusca came out (Bull. M. C. Z., Vols. 12 and 18). These classical volumes show Dall's powers at their mature stage. They are not only indispensable in the study of deep sea mollusks and the conditions of their existence everywhere, but they are still in constant use in dealing with shore forms of tropical America.

From 1890 to 1903 Dall was engaged upon his *magnum opus*, "Contributions to the Tertiary Fauna of Florida",

¹ From C. Hart Merriam, Science, 1927, p. 346.

small quarto, 1654 pages and 60 plates, published in six parts by the Wagner Free Institute of Science, Philadelphia. Malacologists and paleontologists will probably agree that this is the most important single work ever issued in America on marine Mollusca, and at the same time on American Tertiary paleontology. Its great influence upon the progress of paleontology will be obvious to anyone familiar with literature of our Tertiary published before and after Dall's work. The discussions on molluscan taxonomy and nomenclature give these volumes a high value to conchologists as well as to paleontologists everywhere—far beyond the limits expressed in the modest title.

Dall's work on Tertiary Mollusca was continued in his "Miocene of Astoria and Coos Bay, Oregon", 1909, the "Monograph of the Molluscan Fauna of the *Orthaulax pugnax* Zone", 1915, and numerous shorter papers.

In the years devoted to Tertiary paleontology Dall elaborated his new classification of the Pelecypoda, based chiefly upon the morphology of the hinge. It was outlined in his article in Eastman's edition of Zittel's "Textbook", 1896, subsequently elaborated in various paleontological papers and in a series of synopses of the classification of families and of the American species of each, published in "Proceedings of the U. S. National Museum", "Nautilus", "Journal of Conchology" and some other serials. Those who have gathered this series of about 20 papers into one volume find it indispensable in dealing with our marine bivalves.

In land mollusks Dall's work was chiefly descriptive and faunistic. His three papers on the Galápagos fauna form practically a monograph. He published the first account of the land shells of the United States-Mexican boundary region, and many short papers descriptive of Mexican and United States species.

"In 1899 Dall was one of the most eminent of the scientific guests of the late E. H. Harriman on the famous and unique Harriman Alaska Expedition. It is well within the truth to say that in view of the vast amount of work done

by Dall during his thirteen previous visits to Alaska and in the preparation of his publications on the geography, geology, meteorology, anthropology and natural history of the territory, his knowledge was of the greatest service; while his genial disposition and readiness to answer multitudes of questions, both to individual members and at the evening gatherings in the cabin, made him the most beloved member of the expedition. To the series of thirteen volumes on the results of the research work of the voyage, he contributed a valued article on the 'Discovery and Exploration of Alaska' and a beautiful and touching poem on the Innuite People."² To the technical series he contributed the account of "Land and Fresh Water Mollusks" (Harriman Alaska Expedition, XIII, 1905; 171 pages, 2 plates), a summary of existing knowledge of American mollusks north of parallel 49°. This work covers territory quite inadequately treated of in previous manuals, and is further useful for its copious references and the revision of nomenclature of fresh water families.

From his early days in California, over fifty years ago, Dall kept up his interest in West Coast and Alaskan marine mollusks; throughout the half century he remained the chief authority on those faunas. He described a very large number of species in many papers, finally (1921) publishing a "Summary of the Marine Shellbearing Mollusks of the Northwest Coast of America, from San Diego, California, to the Polar Sea". It had been hoped that he would publish a monograph with figures and synonymy, a task for which he was equipped by life-long familiarity with the fauna.

In the space available it is possible to mention only Dall's more extensive works. No small part of his time was given up to correspondence. He was always ready to give the benefit of his wide knowledge to earnest students, even to beginners in science. Practically every conchologist in America can testify to his generosity in the identification

² C. Hart Merriam, *Science*, p. 347.

of material and in help with intricate questions of taxonomy and nomenclature.

An excellent portrait was published in this journal for May, 1915.

"It was the possession of such sterling qualities as intellectual capacity, patience, industry and thirst for knowledge, coupled with high ideals of integrity and obligation, that enabled Dall to attain the position he so long held among the eminent scientists of the world. The closing words of his appreciation of his friend William Stimpson may well be applied to himself: 'Those who had the privilege of his companionship will carry an abiding memory of his abilities as a naturalist and his noble and lovable characteristics as a man.'" ³

—H. A. P.

A NEW SUBSPECIES OF THAIS FROM LOUISIANA

WILLIAM J. CLENCH
Museum of Comparative Zoölogy

THAIS FLORIDANA HAYSÆ, subsp. nov. Plate 1, fig. 1.

Shell large, acutely ovate, exterior color, a dull gray to brownish gray, occasionally spotted with small, irregular patches of bluish. Whorls convex, 6 to 7, regularly increasing in size. Two rows of large, usually two- or three-ridged blunt tubercles are produced on each whorl a little above the middle. Proceeding toward the spire these tubercles become two-ridged, finally becoming a series of single knobs. (Holotype.) Spire acute, produced. Aperture ovate to ovate-rounded, about half the total length of the shell. Inner margin of the palatal lip strongly crenulate, inner periphery of aperture pale orange to yellowish orange, shading into light pink below. Canal slightly pro-

³ C. H. Merriam, Science, 1927, p. 347.